

Z88 EPROM

October 1991

Vol.5 No.8

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Club Addresses

All articles for **Z88 EPROM** and any membership matters (**except** Software Library) should be sent to:

**ROY WOODWARD
Z88 USERS' CLUB
68 WELLINGTON STREET
LONG EATON
NOTTINGHAM
NG10 4NG**

All requests for software from the Club Software Library, (**but not** special offers), items for inclusion in the Library, and EPROMs for erasure should be sent to:

**IAN BRABY
THE SOFTWARE LIBRARY
Z88 USERS' CLUB
3/8 JENNER ROAD
GUILDFORD
SURREY
GU1 3PL**

Please note that the **Library** address is the one to use when sending for a list of Library programs - this list is **not** available from the main Club address. Be sure to enclose £1 plus a SAE for the list. Also note that this list now contains the CLI Library List.

CLIs for inclusion in the Software Library should be sent to:

**MICHAEL HEY
18 WOODSIDE ROAD
SANDIACRE
NOTTINGHAM
NG10 5GP**

ALWAYS include your Membership Number with any correspondence. This is not just to be awkward - now the Club is large it can be very time-consuming searching the database for a member's number. Your number is printed on the address label of each issue of **Z88 EPROM**. Please be sure to enclose a stamped-addressed envelope with anything needing a reply.

Editorial

Welcome to another edition of Z88 EPROM.

Hot news in this issue about the new version of the Z88, which seems due for launch next Spring.

Unfortunately it has been necessary to up the price of the 128k internal upgrade, basically because I ended up paying more for the RAM chips than I had expected. The increase to £44.95 still represents good value for money, and you can normally expect to be without your machine for about a week, including postage times.

One last point - I now have new stocks of the Z88 Developers' Notes - please note that this is a reprint of the current second edition, as CCL have accepted that it will be some considerable time before a new version is released.

Newslines

New Z88 - Details Emerge

More information regarding the Mk. 2 Z88 has recently emerged from CCL. It appears that the team at Irvine are working towards a launch date of Spring next year - possibly April, although it is early days yet.

The new Z88 will at first glance appear physically identical to the existing machine, in that it will have the same rubber keymat, and the same size of display. Closer inspection of the new machine will show up two new ports: A parallel printer port, and a port for a full size monitor. The first would appear to be relatively easy to do, the latter I feel is unlikely.

The keyboard, although using a similar rubber keymat, will not use the flat membrane underneath the mat, but real keyswitches, which should give the keyboard a more positive feel, and also make it more reliable.

The circuit board will be changed completely, moving away from the DIL chips and discreet components of the current board to full

surface-mount technology. This will have two effects - it will reduce the manufacturing cost of the board, and more importantly it will make the circuit more robust and more reliable. The re-design of the board is being done by CCL's parent company, SCI in America. I understand work is well advanced, and that CCL may already have prototype boards.

Another important addition to the hardware will be a battery to protect the contents of the RAM, rather than relying as it does at the moment on a capacitor. The new machine will also definitely feature more RAM - the design catering for up to 1M of both RAM and ROM. Perhaps this could lead to two models with different internal RAM - a 128k machine and a 512k machine perhaps? RAM expansion using the existing cards will of course still be possible.

One area that CCL are unlikely to change dramatically is the display. There are two reasons for this - the high cost of larger displays, and the higher power demand, which would drastically reduce battery life. I would hope that perhaps the size of the display could remain the same, but that the display technology could be updated to one of the latest retardation film displays, as used in the Psion MC and Series 3 ranges. These displays have higher contrast and a wider viewing angle than the supertwist display used in the existing model.

There is no news on the software front at the moment, but surely CCL have got to keep their options open, and should consider expanding the range of inbuilt applications. The two additions that spring to mind are a spelling checker, and perhaps an outliner.

Regarding the hardware, I think it is a mistake if the new machine has a similar rubber keyboard - many people are put off by the durability of the rubber mat, and this is particularly a problem in schools, where the mat is often ripped to pieces by lovable students. One area which I have not heard mentioned is battery power. It would be nice if the power consumption could be reduced to usefully extend the battery life. Another vast improvement would be a facility to run the machine off rechargeable batteries, be it five standard AA cells held internally, or even a custom battery pack. I'd also like to recharge these batteries in situ with the standard mains adapter. Data loss due to flat rechargeables would no longer be a problem with the internal back-up battery.

Helpline

If you have a technical query, write to one of our Helpliners listed below. Please note that you should include a stamped addressed envelope or sufficient return postage for your reply.

CLI Files - Contact Michael Hey by post only at: 18 Woodside Road, Sandiacre, Nottingham. NG10 5GP

Z88 to Amstrad PCW Link - Please write in the first instance to: Mr A West, 16 Southway, Burgess Hill, Sussex. RH15 9ST.

zBASE, CLI and all Wordmongers products except TX and Comms software - Contact Jason Crook (ex of wordmongers) at TPR. J.S.A. Crook, 4TP B SQN, The Royal Hussars (PWO), Swinton Barracks, BFPO 17. I will also write to order in zBASE.

zBASE - Help on commands and programming. I can accept info/programs on paper. EPROM, zTape cassettes or IBM disk. Contact Robin Jarvis, 27 Gloucester Road, Waterlooville, Hants. PO7 7BJ.

Z88 to Amstrad CPC Link - Contact Duncan W. Kennedy at 32 Otterston Grove, Dalgety Bay, Fife. KY11 5PA.

BASIC Programming - Contact Richard Russell at 59 Campbell Road, Gravesend, Kent. DA11 0JZ.

Interfacing Z88 to various hardware - Mac, BBC, PADs, also UNIX and C experience - Contact J.P. Knight Email JANET on jpknight@uk.ac.lut.sunu, or snail mail during term time to Room 66, Hazlerigg-Rutland Hall, Loughborough University of Technology, Ashby Road, Loughborough, Leics, LE11 3TZ.

Z88-PCW Link - Using C-Port program. Please contact David Prestage at 47 Knighton Road, Otford, Sevenoaks, Kent. TN14 5LD.

Anything Educational - Please contact Bob Shore, 8 Anchor Close, Hathern, Leics. LE12 5HP. Telephone 0509 842670.

Machine-code Programming - Please contact Richard Smith, 29 Sandhouse Crescent, Scunthorpe, South Humberside, DN16 1JF.

Printer Setups - Please contact David Stewart at 44 Margetts, Hemingford Grey, Huntingdon, Cambs. PE18 9EP. If you have any queries concerning general printer problems, eg. correct use of cables, how to connect up the printer, printer code language, understanding the information in the printer handbook, etc. please write to David. Notes on Printing, covering the above topics, are available by post from David. Price £3.00 for 30 A4 pages of detailed advice.

File Transfers - Free file transfers to/from most formats (excluding Amiga). 10 files max. and must be Z88 related - no commercial programs copied. Send disk and pre-formatted copy media, with Club Membership and return p&p to: Phasor Video, Elcot Lane, Marlborough, Wilts, SN8 2AZ. Tel: 0672 514451 (2.00-5.00pm)

Members' Letters

Ray Fordham, Managing Director
E.F.S. Ltd
Chesterton Mill
French's Road
Cambridge CB4 3NR

Dear Roy,

Just a few lines to note an error in Z88 EPROM Vol.5 No.6, where it stated that Z88 users who return their machines for repair would receive a unit back with a new PCB. This is not the norm as units are repaired and returned to the customer. The exceptions to this relate to PCB damage where the board is broken, or where it has been attacked by battery leakage. As the official repair facility acting for CCL we can confirm that during the past 12 months this has been necessary on about six occasions.

The price for repairing a board including a complete service is £55.81 including VAT and delivery. This also includes any case and keyboard components where found to be necessary.

I hope you can correct this error as it may mislead some of CCL's customers.

(My apologies to all concerned. There was certainly no intention to mislead anyone. My information regarding board replacement dates from the days when CCL were based in Cambridge, and I assumed that the policy still stood. I am very happy to have been corrected on this - Roy)

Mr E F Jacobs (4234)
Leicester

Dear Sir,

Thank you for the subscription reminder for Z88 EPROM. Having been very much in two minds about renewal, indeed even about keeping my Z88, I'm writing to you about the magazine.

In spite of being an experienced BBC user with Wordwise+ and various other ROMs, I have found it very difficult to cope with PipeDream files both in the Z88 and on transferring them to Wordwise+.

The User's Guide and Dabs book are not easy to use, being written in a tutorial style with little thought to their function as reference books. I felt, therefore, that I might learn a great deal from Z88 EPROM, just as I have done, and continue to do, from Beebug (since its first issue).

Unfortunately there has been nothing of any use at all in Z88 EPROM - much gossip about health, holidays and the like but no pages of hints and tips, and no brief answers to beginners' problems. It is unlikely that I shall ever refer back to issues of Z88 EPROM in the way that I regularly do with Beebug.

The few problems that have appeared seem to have been directed at the experienced people who are already successful in their use of their Z88s, and are usually couched in language only understood by those who possibly don't need much help.

I should like to read articles written directly to the point, in simple language and without any assumption that I am already quite familiar with the subject under discussion. If you always aim at those "in the know", you will always go over the heads of those like myself who are struggling to get into that happy condition.

For a start, if you would like me to be specific, I need help on the management of the files in respect of RAM cards and the spare blocks of memory (both in the internal memory and in the cards) after the splitting and erasure (<>EF) of PipeDream files; on the options available after "No Room" errors and so on. My experience with disks has been of no help with the RAM cards - maybe it is the actual cause of the blind spot - and the answers are not in the books.

RANGER

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Z88 Price List

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Z88 (Ranger version)	£201.50
Z88 (Int. versions)	£215.95
Rugged Ranger	£299.00

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RangerLink (9 pin)	£54.00
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SqueeZ'88	£44.00
RangerUniverse	£125.00
PC PipeDream (3.5")	£99.00
PC PipeDream (5.25")	£99.00
Vision-100	£175.00
Z-Term	£43.50
z-BASE	£60.00
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RangerDisk PC Driver	£30.00
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BOOKS

Z88 Developers Notes	£40.00
Z88 BBC BASIC	£14.50
Z88 Magic	£14.95
Z88 Dabhand Guide	£14.95
Z88 PipeDream (Dabs)	£14.95
Z88 User Manual (CCL)	£17.00

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Ranger House
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Fax: (0604) 589505

Next, an account of file transfer in simple terms would be useful. How does one deal with a catalogue in slots when trying to print it out neatly tabulated via Wordwise+ ? How do you get a Z88 original which has been converted to a Wordwise+ file, back into its first state in PipeDream? The software supplied with the BBC-Z88 link doesn't appear to cope.

I have written to Helpline about my most urgent problem, but the reply, if it provides a solution, won't be shared with the few dozen others who are probably having the same trouble. There must be members with wide experience of dealing with these problems who could explain them step-by-step in the magazine, so that we beginners could find out at what stage we have gone wrong, saving the individual time of the Helpliners for more demanding services.

In the hope that my needs will spark off some inspiration in Z88 EPROM, I enclose my renewal form for 5 issues. The cheque also includes £3.50 for a ticket for the Workshop Day. That, I think, is giving you a fair chance! If I can't make progress quite soon, I shall cash in my Z88 and upgrade on the BBC.

(Ouch! Some harsh words indeed from Mr Jacobs. The content of Z88 EPROM basically reflects the contributions I receive, plus some articles that are specially requested. Regarding the level of the articles, many members find them too advanced, while equally I get complaints about the articles being too simple! A case of you can't please all of the people.... My aim as editor is to try to strike a happy medium wherever possible, by offering articles that cater for all levels, but in any one issue this is not always possible. I do take exception to the "much gossip about health, holidays and the like" Mr Jacobs mentions - you will only find such comments in the Editorial section of Z88 EPROM, and if Mr Jacobs cannot accomodate a friendly writing style in that section, that is his problem. - Roy)

Wally Wright (0753)
32 Spencer Street
St Albans
Hertfordshire. AL3 5EG

Dear Roy,

I have written to you previously concerning the Z88 implementation of Kermit which I have worked on sporadically over the last 18 months and which has been available from the Software Library for some time.

Unfortunately, it is becoming increasingly difficult to find the time to invest in projects like this, and I wondered if there might be someone out there who would be keen to take over Kermit development from here on.

Kermit is written entirely in 8080 assembler (a subset of Z80 assembler). A great deal of work has been done since the last version was lodged with the Software Library although it is not presently stable enough for the next release.

Knowledge of programming the Z88 at machine level is a pre-requisite and familiarity with 8080 assembler code would be an advantage. You will also need a PC compatible machine, or at a stretch, a CP/M computer. A hard disk is also a requirement.

If anyone is interested in such a project, or would even just like some further information about what is involved, please contact me

Software Review - STERLING pfs

by Ian Braby (0123)

STERLING pfs (Personal Finance System) is a new program about to enter the Z88 Software Library. It is a ShareWare program, meaning that, if you like it, you must register ownership with the author (David Humphries) and, in return, you get a full, printed manual and an add-on module which extends the range of functions of the program.

But what is it? It's a home finance package, like the **zBase Eazy Money** suite, but this is a stand-alone program (written in BASIC and machine code) which features some of the functions I missed so much with **Eazy Money**, notably the ability to apply standing orders automatically and to reconcile (and then archive) transactions.

The version I shall concern myself with is the full v1.8 with the add-on reports and standing order module. The Library release will not feature this module!

Let me commence by paraphrasing something I wrote about in my review of **Eazy Money**. Home finance programs are only of use if you use them! By this I mean that, if you do not make them a part of your day-to-day routine, you would be better off with a pencil and paper. However, if you want to know precisely where you stand with your bank, credit cards, etc., then this is for you!

When you first load the program you are faced with a "log-on" screen at which you must enter a password. The very first time you use the program the password is set for you. This can, of course, be changed to anything you care to remember to prevent unauthorised access to your accounts.

Pass this hurdle and you are presented with a menu containing 8 options and, to the right, a blank column which will, in time, contain a scrolling list of all your accounts and their balance details. Before you get to that, of course, you need to create your accounts by taking Option 8.

Option 8 - Update Accounts - allows you to enter the details of the individual accounts you wish to follow, for example your bank account, credit card(s) accounts, building societies or "nominal accounts" like groceries, etc. There are, in fact, four account types that the program recognises: Bank Accounts, Credit Card Accounts, Petty Cash Accounts and Nominal Accounts. The main difference between nominal accounts and the rest is that nominal accounts can be reset to zero when you archive your transactions.

The entry process is well structured and the manual very clear on how to set up the details.

This done, and balance details entered, when you return to the main menu you'll find the list of accounts on the right of the display. Using the up and down cursor keys scrolls this list, revealing the account numbers which will be used next.

At this point you can start to use the program by taking Option 1 to Update Transactions and enter details of your day-to-day business. However, if you wish to use the system to it's full, Option 2 would be better - Update Standing Orders.

Option 2 allows you to enter all the details of standing orders or direct debits that you have against your bank account, building society or credit cards. Standing orders can have variable frequencies of Monthly, Bimonthly, Quarterly, Half-yearly or Yearly. Monthly debits can be set to be from, for example, only June to February (poll tax, for example).

Standing orders need to be applied, which is to say that the program does not check the dates of each standing order and apply them individually; they are batch applied on a monthly basis by taking Option 6 - Housekeeping Menu. All of that month's standing orders are then applied but the account listing always shows the correct balance on the day, regardless of the number of standing orders which appear in the transaction listing.

The other options on the menu are: Option 3 - Transaction Listing Menu - this takes you to a sub-menu from which you may: 1. view all of the transactions of a particular account; 2. list and reconcile transactions - for example when you receive your bank account statement you can go through your bank account details and mark off (reconcile) all those transactions which have cleared; 3. list all the transactions. Option 4 - Save. This flashes at you to remind you to save your data when you have amended the database and then shows the time and date of the last save. Option 5 - Balance and Sort - entering details of transactions often means that the date order of the transactions is lost; this restores it! Option 6 - Housekeeping Menu - another sub-menu which allows you to: 1. Process Standing Orders 2. Archive Transactions; only reconciled transactions can be written to the archive file (for which there is not yet a suitable program which allows you to read the contents). You archive to a suitable date and nominal accounts can be re-set to zero. The new database file will contain "Brought forward" statements for the accounts not set to zero. 3. Update System Defaults; customise the printer driver for the reports. 4. Change Password (I told you you could!).

Finally, Option 7 takes you into the Report Menu. From here it is possible to print out an account statement, a full transaction listing, a list of your standing orders or a list of the accounts. These are driven using the printer defaults you entered above.

Overall: a well-structured program with a consistent menu structure and logical defaults. There are various safety features built-in, for example hitting ESCape will abort you to log-on screen but a

warning is shown by the Index Entry. When the program is dormant the Index shows "Sterling pfs 00", when in use it shows "Sterling pfs @@" and when aborted without having been saved it shows "Sterling pfs 00". It could be argued, of course, that simply hitting ESCape should save the data.

The program is easy to get to grips with and as useful as you want it to be (see my earlier comments) and the speed is very much greater than **Eazy Money**.

The basic program will be available, shortly, as **ZS02** - indicating the ShareWare status of the program. It will be joined by **Z100** - WordPerfect Link, which has long been ShareWare, to clearly set these programs aside from the rest. Please note that ShareWare fees should be sent to the author and **not** to the Library!

The ShareWare registration fee will be £16 for which, as I mentioned, you get a printed (clear and concise) manual as well as the Reports and Standing Order module, detailed above.

A Trip Around the Universe

by **Michael W. Hey (0703)**

*"I wish I was a space-man, the fastest guy alive.
I'd fly around the Universe...."*

- an old song.

One disadvantage of the Z88's very convenient method of loading application software is that we users get very spoiled. When you are used to having applications instantly available the process of pulling ROMs in and out of sockets seems excessively tedious.

Now that 256k EPROM cartridges are available large quantities of software can be incorporated on one chip. Many extra applications can be available simultaneously. This saves lots of wear on the Z88's slot connectors and users' fingernails.

Until now the application ROM that has been constantly plugged into my Z88 has been Computer Concepts' "SpellMaster". Now its position has been usurped by... RANGER UNIVERSE!!!!

Previously my largest application ROM has been the Wordmongers Superchip (ThinkZ, Z-Tape, Z-Term and Z-Base on it). Ranger Universe holds eight applications. As if eight applications was not enough, Rakewell have published their own version with nine. Once installed this boosts the number of items in the Index Applications list to twenty one, all available at the press of two or three keys.

I must make it 100% clear that there are two versions of RangerUniverse available - the "economy model" without Squeez~88 comes from Ranger and costs £150.99 and the fully comprehensive one WITH Squeez~88 is available from Rakewell, and costs £172.00. (The eight applications common to both are identical.)

When I asked Vic Gerhardi to send one I expected to receive the usual tiny packet, so imagine my surprise when Postman Pat came staggering up the drive with a box about the size of a milk-crate. This was full of instruction manuals, connecting cables, floppy discs, and thousands of polystyrene chips, which I am still finding all over the house. I mention the size of the box because when you order your own RangerUniverse you cannot expect postie just to pop it through the letter box.

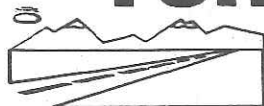
This review cannot hope to cover the operation of each individual component of RangerUniverse in immense detail: it's getting on for 3,000 words long as it is. Here I present a bird's eye sort of over-view, with a list of full reviews with their page numbers at the end. What I hope you will get is a feel for the package as a whole.

For those of you who have not read the adverts the contents of Ranger-Universe-Plus-Squeeze are:- EP_Fetch - the classic.... PCLink - connect your Z88 to a PC QuickEdit - text editor plus spell checking RangerDisc - the software. The disc drive is not included! RangerLink - connect your Z88 to a PC efficiently SPACE - a must for astronauts. Reports on each Z88 slot. VisionL - a VT-100 terminal emulator. (What?) WordFinder - finds words, close matches, anagrams, solves crosswords and Squeez~88, of course.

SPELLMASTER

I have been a user of SpellMaster for years now. This version (1.05) is no different, and is totally compatible with all my old QuickEdit files and user dictionaries. It has a few irritating habits (including crashing occasionally) but I could not survive without it.

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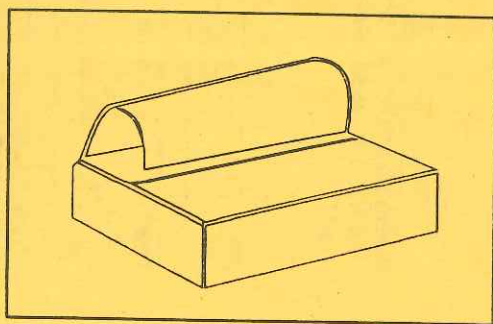
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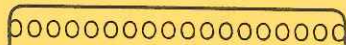
The draw will take place at the end of December 1991.

Winners will be notified by post. Results will be announced in the following copy of 'Eprom' - the Z88 Users Club Magazine.

Rakewell Limited

Denbigh House
Denbigh Road
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MK1 1YP

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About Yourself

Name: _____
Address: _____

Postcode: _____
Telephone Number: _____
Occupation: _____
Your age: (Optional but be honest!) _____

About Your Z88

When did you buy it? _____

Why did you buy it? _____

Do you: _____

Use it regularly	Yes/No
Use it fairly regularly	Yes/No
Use it infrequently	Yes/No
No longer use it	Yes/No

If not, Why Not? _____

What are the things you most like? _____

What are the things you most dislike? _____

Have you suggested that anyone else buy a Z88? Yes/No _____

What happened? _____

Did they like it? Yes/ 5 4 3 2 1 /No
What additional goodies have you purchased? _____

What are you planning to buy?
Item _____
When? _____

Other Computers You Use

Make _____ Model _____ Home or Work? _____

What do you use it for?

If you use computers at work, who buys them?

You Yes/No

May we contact you about computers?

Yes/No

Colleague

Name:

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We know that some people probably know of 'Vic Gerhardt' better than of Rakewell Ltd. Are you one of these people? Yes/No

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Why did you buy it?

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Why did you buy it?

Why didn't you buy it from us?

What are you planning to buy?

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◆ Yes/No

If this form is too small for you to write or type on use a separate piece of paper for your answers..

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PipeDream
Breaking down the barriers

SPACE

No, not the Final Frontier, but the ultimate Z88 PopDown! It is almost worth getting RangerUniverse for this alone. By pressing [JZS from any application an info box appears in the centre of the screen detailing what is fitted into each slot, but how much of it is unused. For example I shall press it now... and I am informed that I have

OZ version 3 Internal: 128 k of RAM fitted 107k free Slot 1: 512 k of RAM fitted 314k free Slot 2: 256 k of ROM fitted - RangerUniverse Slot 3: 256 k of EPROM fitted 97k free

Press ESC to end

Note how it correctly identifies RangerUniverse ROM in slot two. Impressive stuff, eh? This is how the <>CARD facility of the Index should have worked. Roy Woodward has kindly replaced my Z88's internal memory with one of his lovely 128k RAM chips, so it is very satisfying to be able to survey all that lovely virgin memory!

When space runs short it is handy to be able to see if there is enough room anywhere to stash that great big PipeDream file you are working on. Likewise, you can watch the free space on your EPROMs dwindle rapidly away to zero.

And it is fascinating to see how OZ carves up the RAM available to it. This PipeDream application is gradually taking over more and more of :RAM.1.

Nothing in this universe is perfect, and SPACE is no exception. The only way to resume by pressing ESC. Index or [JP (or whatever) will not work, and the Z88's "time-out" is disabled which risks running the batteries flat.

Here is an interesting puzzle. When I erase some files in :RAM.1 the amount of free space in :RAM.0 increases too! You can apparently gain up to 5 k in one RAM device by throwing out files from the other! The explanation is that SPACE itself uses up 8k of RAM while it is running; and sometimes this is taken from RAM.0 and sometimes from RAM.1.

Squeez^Z88

Despite it having been reviewed before I am going to extol the virtues of Squeez^Z88 for a bit, since it incorporates so many of the features that should have been in the Z88's original Filer.

(Isn't hindsight wonderful. Actually time is ripe for a plug-in ROM with a SuperFiler application that would avoid all the present Filer's irritating inadequacies. Don't you think SuperFiler is rather a good name?)

As I was saying, SqueeZ~88 has several very useful features. For a start you get two directory windows, so you can look at files in two places at once.

There is a "look at" facility which enables you to mark a file (or several files) and then examine the contents without the bother of going into PipeDream.

There is a wonderful Copy command which allows you to move files from one place to another with the option of erasing the original, and with an alert to ensure that you do not accidentally over-write a file with another of the same name, together with some deliciously Mac-ish looking icons. The Z88 was never like this before!

And there is a report of "bytes free" and number of files and directories always available.

Once you have gotten used to these features it is hard to imagine life without them.

(Incidentally, I now have yet another way of making my Z88 work more like a Macintosh. I have created a Directory called "Trash" into which I move out-of-date files. [Users of System 7 will note that this is "persistent trash", and is not lost when the computer is switched off. Once again my Z88 is keeping level with the cutting edge of Mac technology.] When I eventually run out of space I run a CLI called "empty-trash" which erases all the files in the Trash directory. It works like a dream.)

And then there is the password feature.... I know people who have been waiting years for this. The only thing I never use SqueeZ for is "squeezing" files. Most of my files are smaller than 5k. In fact most are smaller than 1k! The only file of mine which is large enough to justify compressing is my address list (9k). I refer to this often and usually in a hurry (see "A Rose by any other Name", June '91). Having to unsqueeze my address list every time I need to make a phone call would be excessively irritating.

The biggest file on my Z88 at the moment is this one, and I am sure Roy would just love having to unsqueeze it before he could get to

grips with all the typos. Remember SqueeZ is not available on the standard RangerUniverse: only on Rakewell's de-luxe version.

Which brings me to **EP_FETCH**.

This is a PopDown that provides the other feature that was left out of the original Filer, namely a reasonable way of fetching files from EPROMs. It is very simple in operation: press [ZF, and then use the up and down cursor keys to scroll up and down the list of files. (SHIFT and <> plus cursor keys act exactly as you would expect.) The size of each file is displayed next to its name.

When the program has scanned your EPROM (which takes about 30 seconds for a full 256k EPROM) the space used and space free are reported. So is the Z88's default directory, where files will be placed, unless EP_Fetch is instructed otherwise. The speed that files travel from EPROM to RAM is satisfyingly fast.

I have long held that computer users are responsible for the loss of more files & data than all hardware and software faults combined, so I was pleased to see that a warning message-plus-BEEP is issued when a file in RAM is about to be over-written by the file coming in from the EPROM. This is "one-up" on the Filer.

EP_Fetch will also retrieve files which have been "deleted", also "one-up" on the Filer.

Any of you wealthy enough to own 256k EPROMs should note that EP_Fetch does not work quite correctly with these. However, help is at hand. A new, improved version is promised for early 1992. Until then you will have to use Steve Marsh's BASIC EP_Fetch (available from Ian Braby as Z028.)

EP_Fetch owes its origins to an example application in an early version of the Software Developers' Notes, and has undergone several minor revisions. A new 256k-EPROM-friendly version is planned for early 1992.

PCLink and RangerLink

These applications enable you to connect your Z88 to a PC, and with suitable software running on that machine, transfer files to and fro. And transform PipeDream files into WordStar or Lotus 1-2-3 format. Connect my Z88 to a PC? I would never stoop so low. (To read the thoughts of someone who did, see Z88-EPROM 4.8.30)

(Actually, my Dad owns an IBM PS/1, so I may find a use for RangerLink after all.)

RangerDisk

Roy Woodward has written a full review of RangerDisk (3.7.10). The disc drive does not come with RangerUniverse, only the DiskFiler software. I thought I would never have any use for this, until the Club Workshop on 26 November. Ian Braby had his Ranger Disk Drive there, so I was able to connect my Z88 to that and down-load a selection of files. You never know when something will suddenly come in useful!

I have considered buying the Ranger disk drive myself, but it is very expensive, and it is below a Mac LC on my shopping list (good news Apple - only £950 to go!)

Vision/L

There is not much I can do with this application. (Nothing, in fact.) There is a very good review of Vision in the April 1990 issue of "Z88 Eprom", where Jon Calvert praises it highly. The version on Ranger Universe is the trimmed-down version, which only goes up to VT125 emulation, instead of the full VT300-and-odd.

I have no doubt that one day I shall suddenly require a VT100 terminal, and when it does I shall be ready!

CONCLUSIONS - PROs

RangerUniverse (+ Squeez~88) gets my hearty approbation. Pop-Downs like WordFinder and EP_Fetch are only any use if they are instantly available: by the time you have got out and plugged in a ROM chip you might as well have reached for the dictionary, or run Z028.

Manuals are provided for most applications (not EP_Fetch or SPACE). They are well written and clear, I think. You see, I dived straight in and started using Ranger Universe without reading them. Broadly speaking commands on Ranger Universe follow established Z88 practice to the extent that using the familiar commands usually achieves the expected result. I always reckon that is a mark of good software, and on that basis Ranger Universe scores about 8 put of 10.

What is the cost of this technological masterpiece? Well, including V.A.T. and postage Universe+Squeez~88 will create a black hole in

your wallet of £172. (This is for U.K. customers, obviously.) This sounds like a lot of money. That's because it is a lot of money, but it works out at less than £20 per application. This is excellent value if you use them all. It is certainly much cheaper than buying each part separately.

CONS

I tried very hard to get all this software to crash, without success. Naughty PipeDream crashed instead. I cannot see how the presence of Ranger Universe could be responsible for sabotaging PipeDream's <>BC and <>FS commands, so that remains a mystery. Apart from EP_Fetch having trouble with 256k EPROMs everything else was fine. I have done no end of copying, spacing, erasing and squeezing with no problems at all.

I was disappointed to find that none of the applications on Ranger Universe use built-in help (except VisionL). I think a help screen which says "If you need help then read the manual, and if you have lost it get another" is terribly disappointing. I have consulted with Ranger, who tell me that the Ranger Universe ROM is about 95% full, and to have included Help files would have meant losing one or more applications. Hand up all those who would like to lose a couple of applications.... As I thought, not many.

One of the problems with a giant package like this is that you have to buy the whole thing; you cannot select just the bits you will need. For example, I cannot afford the Ranger disc-drive (I have had to make do with the plastic, DOS-incompatible XOB drive), and I personally have no use whatever for a VT-100 Emulation Software Package. If I had a pet genie I would get him to put ThinkZ and Z-Term, etc., on the ROM instead, so that I have **all** my favourite software **instantly** available!

Then I would be spoiled.

That's all for now. Beam me up Scotty! (QuickEdit's guesses: Scatty, Snotty or Spotty.)

RangerUniverse is available from Ranger Computers, and the "mega-version" with Squeeze'88 is available from Rakewell Ltd. Their assistance in the preparation of this review (checking technical details) is gratefully acknowledged.

The opinions expressed above are wholly those of the author. (I'm sorry if that sounds rather pompous.)

Addresses:-

Rakewell Ltd., Freepost MK1000, Milton Keynes., MK1 1YX Tel. (0296) 630617

Ranger Computers Ltd., Ranger House, 2 Meeting Lane, Duston, Northampton. NN5 6JG Tel. (0604) 589200

References:-

For full details of the components of RangerUniverse please see the following issues of "Z88 Eprom":-

PCLink II was reviewed 2.4.6, 2.4.28, 2.6.38 (July & Nov. 1988)

RangerDisc was reviewed 3.7.10 (December 1989)

Rangerlink was reviewed 4.8.30 (October 1990)

SpellMaster (QuickEdit and WordFinder) were reviewed 2.5.30, 2.6.3, 2.6.6 (September and November 1988)

Squeez`88 was reviewed, and "squeezing" explained 5.2.14 (March 1991)

VisionL (VT-100 terminal emulation) was reviewed 4.3.31 (April 1990)

EP_Fetch has not been reviewed previously.

SPACE has not been reviewed previously, either.

Library Update

Firstly, a reminder to all that the Post Office increased it's postal rates on 17 September. Some overseas prices have been rationalised and, for your convenience, here is the table of postal charges which will appear in the next edition of the Library List (cover date October 1991):

<u>Item</u>	<u>UK 2nd</u>	<u>UK 1st</u>	<u>Europe</u>	<u>The Rest!</u>
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with - 1 x 3.5"	18p	24p	50p	£1.41
2 x 3.5"	18p	24p	50p	£1.41
Library Listing	18p	24p	50p	99p

This month sees a lot of activity in the Library, both with existing programs being updated and new programs arriving.

Firstly, the updates:

Z100 WordPerfect Link reaches v1.07 and Tinus van de Wouw informs me that those who register with him get a file viewer and mouse support. *Only available on PC disk.*

Dennis Gröning has been busy, too, and the following have been updated:

- Z111 COPYFILE.BAS
- Z112 LABEL PRINTER
- Z113 XEROX 4045 LASER PRINTER DRIVER - now only 5K.
- Z133 SPECTRUM-LINK v2.0+ - now only 19.5K
- ZD01 MANUAL.Z88 - has been modified and an IBM-compatible printer driver has been added (ZD01C). 12K

The new programs:

- Z153 COPIER by Andrew Rowland (4228). Gives you Filer-like control over the copying of files to and from subdirectories or devices. 11K
 - A=documentation
 - B=program
 - C=start-up CLI file.
- Z154 MORTGAGE.PD by Jack Lawrie (4635). Building on the success of Z139, this is a very accurate spreadsheet mortgage repayment calculator. 2.5K
- Z155 BANNER MAKER by P.I.Nicholson (1396); produce banners on a dot-matrix printer. 9K
 - A=documentation
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The 128k RAM in slot 0 is fully available to PipeDream and the Filer. The upgraded machine **does not** behave like an Expanded Machine as defined in the Z88 Developers Notes (ie. one with min.128k in slot 1). You do not get the 40k BASIC etc. unless you also have min.128k in slot 1. See Developers Notes for more details on Expanded Machine.

**Z88 Users' Club, 68 Wellington Street,
Long Eaton, Nottingham. NG10 4NG.**

- Z156 GRAPHICS STORE by Jack Lawrie (4635); allows you to store user defined graphics for future use. 6K
- Z157-160 Four programs from Dennis Gröning (1080)**
- Z157 FCOMPARE.BAS; compares updated files to each other, even if they are different lengths. 2K
- Z158 EPROMCAT.BAS; unlike other, similar, programs this can read 256K EPROMs (in any slot) containing files of any length and output can be sent to a printer with [I]+P. 1.5K
- Z159 ROMDMP6.BAS; loosely based on Mark Stevenson's 'Paged Memory Dump' program (Z88 EPROM Sept/Oct 1988) it will accept addresses from &C000-&FFFF or offset from base of page (0-&3FFF) entered as hex, decimal or expressions. Page numbers are printed in hex. 2.5K
- Z160 PRINT.BAT; a PC batch file to allow you to use your PC as a parallel printer interface. *Only available on PC disk.*

-oOo-

Keep those contributions rolling in!

Ian Braby MRPharmS

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**NEXT ISSUE OUT LATE NOVEMBER
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****STOP PRESS****

New Prices for Z88 Range

Cambridge Computer have announced new reduced prices for the majority of the Z88 range of computers and peripherals. CCL have also become exclusive distributor of the new 256k EPROM and 1M RAM from EFS Ltd of Cambridge. Full details of these new prices can be seen in several of the advertisements inside this issue.

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128k RAM Pack	£38.00	Topper Cover	£9.50
512K RAM Pack	£100.00	Carrying Case	£8.00
1M RAM Pack	£215.00	BBC Link	£10.50
32k EPROM Pack	£19.00	Mains Adapter	£11.00
128k EPROM Pack	£28.00	EPROM Eraser	£44.00
256k EPROM Pack	£65.00		

Z88 Users' Club EPROM vouchers given with all the above except Star Buy.
One voucher worth £1.00 for each complete £50 spent per order. Vouchers are valid for one year and can be used to join the Club or to renew membership, or towards any future orders.

Please add 50p per order part P&P. UK despatch only. Cash with Order.

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